STATE OF CALIFORNIA
DEPARTMENT OF MOTOR VEHICLES

PRELIMINARY EVALUATION OF THE REFERRAL DRIVING PERFORMANCE EVALUATION PROGRAM

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SUMMARY

Introduction

- This report presents the results of a preliminary formative and process evaluation of the DPE referral drive test program. The purpose of the study was to develop descriptive measures of the Referral Driving Performance Evaluation (RDPE) process and, where possible, to determine whether the program guidelines are being followed, particularly the appropriate use of license restrictions and revocations following test failure.

- A follow-up report containing an analysis of subjects' driver records and the internal reliability of each type of RDPE test will be provided in the near future.

- After any necessary changes are made to the RDPE process, another study will be conducted to determine whether the broad objectives of the RDPE program have been met.

- The results are based on DL 11D referral forms, DL 32 Basic Driving Performance Evaluation (BDPE) score sheets, and DL 32S/A Supplemental/Area Driving Performance Evaluation (SDPE/ADPE) score sheets completed between March 16th and April 10th, 1998 by 49 of the 64 DPE offices.

Results

- Fifteen field offices did not report any data for this evaluation. The nonreporting offices were: Hollywood, San Bernardino, El Centro, Blythe, Bell Gardens, Compton, Barstow, Needles, Brawley, Torrance, Inglewood, Lincoln Park, Santa Paula, Twentynine Palms, and Simi Valley.

- Of the 460 referrals to DPE field offices during the study, 37.4% (n = 172) were for a Basic DPE, 58.7% (n = 270) were for a Supplemental DPE, and 3.9% (n = 18) were for an Area DPE.

- The overall 47.9% RDPE fail rate is much higher than the 31.1% fail rate obtained in Research and Development's 1995 evaluation of the statewide special drive test process. The majority of the test failures (85%) resulted from critical driving errors (CDEs). The BDPE and SDPE fail rates were fairly consistent between the different regions; however, the results were suggestive of a slight, albeit nonsignificant, difference.

- The application of the relaxed passing criteria (which permit 35 errors instead of 15 for BDPE retest drivers and 45 errors instead of 18 for SDPE retest drivers) only affected the test result for four drivers. Even applying the relaxed criteria to all test cases would not significantly change the test fail rates. The reason that so few drivers had scores in the "relaxed point" range is probably due to the fact that most drivers who failed the test did so because of CDEs, which result in immediate disqualification. This could explain why so few drivers with marginal skills complete the test and obtain a failing or marginal point score.

- Nearly 1 in every 4 drivers in the study were identified as having already failed one or more prior drive tests.

- As was expected based on prior knowledge of the RDPE test score, the examiner's determination of whether the driver was safe or unsafe—as denoted by the comments in the DL 11D summary—was almost always consistent with the RDPE test result.

- The examiners took a direct action (issued or revoked the license or scheduled an additional drive test) for 24% (n = 103) of the cases, recommended license restriction or revocation for 12% (n = 51), and referred the remaining 64% (n = 278) back to Driver Safety without an action being taken or recommended.

- Only 9% (n = 19) of the 207 drivers who failed the RDPE and who were deemed to be unsafe in the DL 11D summary were revoked by the examiners. Eighty-three percent (n = 172) of these unsafe drivers failed because they made one or more CDEs, which by definition are highly unsafe maneuvers.

- Although the freeway portion of the RDPE was waived for more than 50% of the cases, a freeway restriction was recommended or imposed for only 4%. The examiners also very rarely used other types of licensing restrictions.

- The five most frequently indicated reasons for referral to the field offices were drive test failure (20%), poor driving/lack of skill (20%), stroke/cerebral hemorrhage (16%), dementia (14%), and accident/near accident (13%).

- Thirty-eight percent of the drivers were referred for the incorrect type of RDPE. In 127 of these cases, Driver Safety requested that an SDPE be administered even though there was nothing on the DL 11D form indicating that the driver had an existing or potential cognitive impairment that would have qualified them for the SDPE. The remaining 49 cases were given the BDPE even though information recorded on the DL 11D form indicated that they had an SDPE qualifying condition.

- Almost all of the RDPE cases for which a source was identified were referred by either law enforcement, a physician or hospital, or a field office.

<u>Recommendations</u>

- Information on the type and number of previous RDPEs failed by the driver should be required on the DL 11D form for use by the examiners in making licensing decisions.

- The examiners need to take more responsibility for revoking unsafe drivers. More consistently and firmly stating this in the RDPE guidelines, instead of calling it an "option," may help solve this problem.

- The RDPE procedures should include a more specific and objective definition of "unsafe driving" and of what constitutes "a danger to the motoring public" so that the examiners will better know when they should revoke a license. The definition should specifically refer to the occurrence of CDE errors as a qualifying criterion.

- Examiners should be reminded to suspend the license and issue a Special Instruction Permit to drivers who fail the test and are offered a retest following professional driving instruction. Drivers who make CDEs should not normally be considered as candidates for improvement through further practice.

- A limit should be placed on the number of failed drive tests that are allowed prior to the suspension, revocation, or denial of a license. The current guidelines say that there is no number of test failures that would trigger a licensing action. Imposing a limit would result in greater consistency in making licensing decisions and should reduce the workload associated with retesting of RDPE failures. Failure to set a limit on the number of tests is inconsistent with decisions made in the facilitated task force sessions during RDPE development.

- All BDPEs and SDPEs should include freeway driving unless the driver is to be restricted from driving on the freeway, which according to current guidelines is permitted only for drivers 60 years of age or older.

- Steps should be taken to reduce the high volume of drivers referred for the incorrect type of RDPE test. Clarifying and reinforcing the guidelines for determining when to refer for an SDPE or BDPE would help in this regard.

- Field offices and/or regional management should establish a system for monitoring the RDPE process.

- Steps also need to be taken to require that field offices provide data and forms when requested by top management as part of departmental research projects and program evaluations. The absence of any cases from 15 field offices has compromised the validity and generality of the study. In addition, we have no way of knowing whether any of these offices followed departmental policy in administering the RDPE tests.

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INTRODUCTION

Background

The Referral Driving Performance Evaluation (RDPE) was created through a series of facilitated discussion sessions involving representatives from the Licensing Operations and Field Operations divisions. The RDPE was developed in response to concerns raised by the Research and Development Branch (R&D) over the low reliability and poor validity of the existing Special Drive Test (SDT) process. Both the RDPE and SDT are used to assess the driving competency of experienced drivers with a physical or mental (P/M) condition or lack of skill, or who were brought to the attention of the department by law enforcement, a physician, concerned family members or friends, or some other source questioning the safety of the driver. The deficiencies of the SDT have been documented in internal departmental memos and in a follow-up R&D study (Hagge, 1995, Report #160).

The RDPE is based on the standard Driving Performance Evaluation (DPE), which has been demonstrated in prior R&D studies (Hagge, 1994, Report #154) to be more reliable and valid than the traditional drive test used to test novice drivers in California. The DPE and RDPE are currently being used in 64 DMV field offices in Southern California.

The primary characteristics of the RDPE that distinguish it from the SDT are that it includes freeway driving and a destination-seeking component, has predetermined observation points and more objective scoring, and counts minor maneuver errors (in addition to automatic disqualification errors) in making pass/fail decisions about the drivers' performances. An SDT is only considered to be "unsatisfactory" (a failure) if the driver makes an error serious enough to actually compromise safety during the drive test. Point scores are not used to determine pass/fail outcomes of the SDT.

The goal of the conversion to DPE-based testing was to improve the assessment and licensing of drivers with questionable driving competence. The RDPE was designed with the following outcome objectives in mind:

- Increased standardization and objectivity in competency assessment and licensing criteria.
- Increased difficulty of the referral drive test.
- Increased reliability of the referral drive test.
- Increased ability to distinguish between high- and low-risk drivers.
- Increased ability to screen-out high-risk drivers.

- Increased use of licensing restrictions to reduce the accident exposure of marginally-competent drivers.
- Greater uniformity in making licensing decisions.

Evaluation

This report presents the results of a preliminary formative and process evaluation of the DPE referral drive test program. The present study is limited to developing descriptive measures of the Referral Driving Performance Evaluation (RDPE) process and therefore only addresses, where possible, whether the program guidelines are being followed, particularly the appropriate use of license restrictions and revocations following test failure. A follow-up report, which will contain an analysis of subjects' driver records and the internal reliability of each type of RDPE test, will address the program objectives.

After any necessary changes are made to the RDPE process, another study will be conducted to determine whether the broad objectives of the RDPE program have been met. That evaluation will include a comparison of the RDPE program with the non-DPE special drive test program still in use in Northern California, to determine whether the RDPE process is superior from the standpoint of traffic safety. It will also include a more in-depth investigation of possible inadequacies in the RDPE's assessment and licensing protocols.

Presented within are the numbers of tests given, test fail rates, actions taken by or recommended by examiners, licensing restrictions imposed or recommended, sources of referrals, and other descriptive process information. Also included are recommendations for improving the DPE referral and testing process before conducting a more thorough evaluation of the program.

METHODS

All 64 DPE field offices were instructed to send to R&D copies of all DL 11D (New 9/96) referral forms, DL 32 (Rev. 1/97) BDPE score sheets, and DL 32S/A (New 9/96) Supplemental/Area DPE score sheets completed between March 16th and April 10th, 1998. After administering any referral BDPE, SDPE, or ADPE drive test, the offices were to copy both sides of the completed DL 11D referral form and staple the copies to the original corresponding DPE score sheet. The offices were instructed to package the documents at the end of each week, identify the field office on the envelope, and forward the packages to headquarters. The documents were screened and electronically keyed by R&D.

RESULTS

Data Collection and Screening

Documents were received for 489 cases. Of these, 21 were drivers who were tested at the request of field office personnel. These latter cases were excluded because the focus of this evaluation was on drivers referred by Driver Safety (DS) for an RDPE. An additional six cases were excluded because they did not include a completed DL 11D form along with the DPE score sheet, and two more were excluded because they did not include a DPE score sheet along with the DL 11D referral form when a test was given. The results presented below are based on the remaining 460 cases.

Field Office Nonreporting

The following fifteen field offices did not submit any data for the evaluation: Hollywood, San Bernardino, El Centro, Blythe, Bell Gardens, Compton, Barstow, Needles, Brawley, Torrance, Inglewood, Lincoln Park, Santa Paula, Twentynine Palms, and Simi Valley. Based on Licensing Operations Division's (LOD's) counts of RDPEs given in each field office between September 1997 and April 1998, it was estimated that the nonreporting offices would have contributed only about 12% of all RDPE activity. Therefore, any bias in the study results caused by the exclusion of RDPEs given in these offices would be fairly small. The RDPE case volumes reported by the other offices were generally consistent with or higher than what would be expected from the historical counts provided by LOD, and therefore any bias arising from underreporting of data is also believed to be minimal.

RDPE Volumes and Fail Rates

Of the 460 referrals to DPE field offices during the study, 37.4% ($n = 172$) were for a BDPE, 58.7% ($n = 270$) were for an SDPE, and 3.9% ($n = 18$) were for an ADPE. The referred drivers were given a written law test 15.9% of the time and a vision test 28.0% of the time. Four BDPEs and six SDPEs were not administered because of a vision or law test failure, no proof of insurance, or a vehicle mechanical problem. An additional 7 BDPEs and 11 SDPEs were not administered because the applicants did not appear at the field offices to take the test (no shows). This left 432 cases for which both a DL 11D form and RDPE test score sheet were available.

It is also important to note that there were 20 cases where DS referred a driver for a BDPE but the field office administered an SDPE, and 5 cases where DS referred a driver for an SDPE but the field office administered a BDPE instead.

The test fail rates were computed using the standard cut-off scores of 15 errors for a first-attempt BDPEs, 18 errors for a first-attempt SDPEs, and from 20 to 40 errors for

ADPEs. Relaxed passing cut-off scores of 35 and 45 errors were used for retest BDPEs and SDPEs, respectively. In addition, cases for which one or more CDE was indicated were also scored as failures, regardless of the test type.

A total of 100 cases were identified by DS or the examiner as having previously failed one or more drive tests. As indicated above, these retest cases were graded using a relaxed passing cut-off score for the purposes of this study. (In actuality, the use of the more lenient passing criteria had almost no effect since it changed the test result for only four retest cases.)

Table 1 presents the number of tests administered, average test time, average driver age, overall percentage failing, and percentage failing due to one or more CDEs for each type of test.
The overall 47.9% fail rate in Table 1 is much higher than the 31.1% fail rate obtained in R&D's 1995 evaluation of the statewide special drive test process prior to the creation of the RDPE program (Hagge, 1995, Report #160). This result was expected due to the higher proficiency standards demanded by the DPE test in general. Table 1 also indicates that the majority of the test failures (85%) resulted from CDEs. An average of 2.5 CDEs were made by the 175 applicants failing in this manner.

Table 1

Number of Tests (*n*), Mean Test Time, Mean Driver Age, Overall Percentage Failing, and Percentage Failing Due to Critical Driving Errors (CDE) for the Basic, Supplemental, and Area Referral Driving Performance Evaluations

Test type	*n*	Mean time (minutes)[a]	Mean age	% failing	% failing due to CDE
BDPE	161	28.2	66.5	42.9	34.8
SDPE	253	31.5	70.6	52.6	45.1
ADPE	18	60.5	82.3	27.8	27.8
Total	432	30.9	69.6	47.9	40.6

[a]Test time was not available for 37 BDPEs, 67 SDPEs, and 10 ADPEs. These cases were excluded from the computation of this measure.

The BDPE and SDPE fail rates and number of tests given are presented by region in Table 2. The differences in the regional fail rates were not statistically significant for either the BDPE (p = .25) or the SDPE (p = .20). These results indicate that the obtained

differences between the regions could have occurred by chance alone 25% of the time for the BDPE and 20% of the time for the SDPE. While the differences were not significant according to standard levels used for determining statistical significance ($p < .05$), the data are still more consistent with a moderate regional difference in the fail rates than with the null hypothesis of no difference, particularly for the SDPE.

Table 2

Number of Tests (*n*) and Percentage Failing by Region

	BDPE		SDPE	
Region	*n*	% failing[a]	*n*	% failing[b]
V	43	51.2	51	43.1
VI	34	32.4	24	41.7
VII	47	38.3	76	52.6
VIII	37	48.6	102	59.8
Total	161	42.9	253	52.6

Note. ADPEs were not included in the table due to the low count of tests given.
[a]χ^2 (3) = 3.65, p = .25. [b]χ^2 (3) = 5.11, p = .20.

Point Score and Cumulative Percentage Passing

Tables 3, 4, and 5 present the cumulative number and percentage of applicants by the number of errors made on the BDPE, SDPE, and ADPE, respectively. The shaded line in each of the tables indicates the number and percentage of cases that would have passed, had the standard passing criteria (cut-off scores of 15, 18, and 20 to 40 for the BDPE, SDPE, and ADPE, respectively) been applied regardless of the number of previous tests taken.

Consistency Between Examiner Summary and RDPE Result

The examiners are required to summarize the overall test performance on the back of the DL 11D after an RDPE has been administered. The summary should indicate whether the driver did or did not demonstrate safe driving, based on the RDPE score and the specific maneuvers they observed during testing.

Table 3

BDPE Cumulative Number and Percentage of Cases by Number of Errors

Number of errors	Cumulative number	Cumulative %
0	0	0.0
1	1	0.6
2	2	1.2
3	6	3.7
4	14	8.7
5	20	12.4
6	24	14.9
7	34	21.1
8	40	24.8
9	51	31.7
10	57	35.4
11	60	37.3
12	66	41.0
13	76	47.2
14	80	49.7
15	91	56.5
16	92	57.1
17	97	60.2
18	97	60.2
19	97	60.2
20	98	60.9
21	100	62.1
22	102	63.4
23	102	63.4
24	102	63.4
25	104	64.6
26	104	64.6
27	104	64.6
28	104	64.6
29	104	64.6
30	105	65.2
31	105	65.2
32	105	65.2
33	105	65.2
34	105	65.2
35	105	65.2
Critical driving errors	161	100.0

Note. The shaded line represents the pass rate at the standard cut-off score of 15 errors.

Table 4

SDPE Cumulative Number and Percentage of Cases by Number of Errors

Number of errors	Cumulative number	Cumulative %
0	1	0.4
1	2	0.8
2	4	1.6
3	6	2.4
4	10	4.0
5	17	6.7
6	23	9.1
7	32	12.6
8	37	14.6
9	44	17.4
10	58	22.9
11	65	25.7
12	73	28.9
13	84	33.2
14	93	36.8
15	103	40.7
16	108	42.7
17	109	43.1
18	115	45.5
19	116	45.8
20	119	47.0
21	121	47.8
22	125	49.4
23	125	49.4
24	127	50.2
25	129	51.0
26	131	51.8
27	132	52.2
28	132	52.2
29	132	52.2
30	133	52.6
31	133	52.6
32	133	52.6
33	135	53.4
34	137	54.2
35	137	54.2
36	138	54.5
37	138	54.5
38	138	54.5
39	138	54.5
40	138	54.5
41	138	54.5
42	138	54.5
43	138	54.5
44	138	54.5
45	138	54.5
46	138	54.5
47	139	54.9
Critical driving errors	253	100.0

Note. The shaded line represents the pass rate at the standard cut-off score of 18 errors.

Table 5

ADPE Cumulative Number and Percentage of Cases by Number of Errors

Number of errors	Cumulative number	Cumulative %
0	0	0.0
1	0	0.0
2	0	0.0
3	0	0.0
4	0	0.0
5	3	16.7
6	4	22.2
7	5	27.8
8	5	27.8
9	5	27.8
10	5	27.8
11	8	44.4
12	11	61.1
13	12	66.7
14	12	66.7
15	13	72.2
16	13	72.2
17	13	72.2
18	13	72.2
19	13	72.2
20	13	72.2
21	13	72.2
22	13	72.2
23	13	72.2
24	13	72.2
25	13	72.2
26	13	72.2
27	13	72.2
28	13	72.2
29	13	72.2
30	13	72.2
31	13	72.2
32	13	72.2
33	13	72.2
34	13	72.2
35	13	72.2
36	13	72.2
37	13	72.2
38	13	72.2
39	13	72.2
40	13	72.2
Critical driving errors	18	100.0

Note. The top shaded line represents the pass rate at the lower-bound cut-off score of 20 errors. The bottom shaded line indicates the pass rate at the upper-bound cut-off score of 40 errors.

Table 6 compares the examiner's conclusion regarding the safety of the driver with the RDPE result. For purposes here, test result was determined first based on the standard passing criteria for all cases, and then again based on the standard passing criteria for first-attempts and the relaxed criteria for repeat attempts. The results indicate that the examiners' determinations of safe and unsafe driving were consistent with the RDPE outcome for almost all the cases. This, of course, was expected considering the examiners' knowledge of the RDPE scores. The percentage of drivers who were considered safe by the examiner but who failed the test was only 2.3% using the standard criteria and 1.4% using the relaxed criteria.

Table 6

Percentage of Drivers the Examiners Considered Safe and Unsafe by RDPE Test Result Based on Standard and Relaxed Passing Criteria

Examiner summary	Scoring criteria and test result			
	Standard		Relaxed (for retests)	
	Pass	Fail	Pass	Fail
Safe driver	49.8	2.3	50.7	1.4
Unsafe driver	0.9	47.0	1.4	46.5

Examiner Actions and Recommendations

The number and types of actions taken or recommended by the examiners are presented in Table 7 for applicants who passed and failed the RDPE based on the standard passing scores for first-attempt cases and the relaxed passing scores for retest cases.

Table 7

Actions Taken or Recommended by the Examiners for Applicants Who Passed and Failed the RDPE

Action	RDPE result		
	Pass	Fail	Total
Recommended license restrictions	27	12	39
Scheduled additional drive test	0	38	38
License issued	23	0	23
Restricted license issued	23	0	23
License revoked	0	19	19
Recommended revocation	0	12	12
None	152	126	278
Total	225	207	432

For 72% (n = 311) of the cases in Table 7, the hearing officer indicated on the DL 11D referral form that DS would make the licensing decision. For 28% (n = 121) of the cases, the examiner was instructed by the hearing officer to make the licensing decision. The examiner took a direct action (issued or revoked the license or scheduled an additional drive test) for 24% (n = 103) of the cases, recommended license restriction or revocation for 12% (n = 51), and referred the remaining 64% (n = 278) back to DS without taking or recommending an action.

The RDPE procedures require that the examiner revoke the licenses of drivers they consider to be unsafe. However, only 9% (n = 19) of the 207 drivers who failed the RDPE and were deemed to be unsafe in the DL 11D summary were revoked by the examiners. Eighty-three percent (n = 172) of these unsafe drivers failed because they made one or more CDEs, which by definition are highly unsafe maneuvers. In some of these cases, the examiners may have felt it was inappropriate to revoke the licenses because DS indicated on the DL 11D that they wanted to make the licensing decision. However, even for the 59 unsafe drivers for which DS explicitly told the examiner to make the licensing decision (of which 86% failed by CDE), the examiner revoked the license in only 15% (n = 9) of the cases. The failure of examiners to revoke unsafe drivers also cannot be explained by the fact that the license may already have been suspended or revoked; only 15% (n = 14) of the unsafe drivers who were not already suspended or revoked were revoked by the examiners.

For 12 of the drive test failures shown in Table 7, the examiner indicated that the driver's errors on the test were of the type that could not be remedied by further practice or professional training. In these cases, the examiner explicitly requested that DS not refer the driver back to the field office for further testing. The examiners also recommended that 39 of the drive test failures seek professional instruction to improve their skills and then take another RDPE.

Of those failures who were recommended to take professional instruction, or for whom an additional drive test was scheduled, 76% failed due to a CDE. This finding indicates that examiners are not generally following the RDPE guidelines, which allow only marginally competent drivers who may improve with practice to take a second test. Drivers who make critical driving errors are by definition worse than "marginally competent," and therefore should not normally be recommended for further testing.

It is also interesting to note that there were 47 retest cases for which the examiners had previously recommended that the applicant take professional driving instruction to

improve his or her skills. Of these, 60% (n = 28) passed the RDPE on their subsequent attempt and 40% (n = 19) failed again.

Restrictions Imposed or Recommended by the Examiners

The number of license restrictions imposed or recommended by the examiners are shown in Table 8 for RDPE passes and fails based on the use of the standard passing score for first-attempts and the relaxed passing score for repeat attempts. Five percent (n = 20) of the cases had two restrictions imposed or recommended and 3% (n = 13) had three or more.

Table 8

Restrictions Imposed or Recommended by the Examiners by RDPE Test Result

Restriction	Pass	Fail	Total
Corrective lens only	22	6	28
No freeway	15	4	19
Limited term	15	0	15
No nighttime	10	1	11
Special vehicle equipment	7	3	10
Automatic transmission	9	1	10
Right side mirror	6	3	9
Mile radius	6	1	7
To and from locations	6	0	6
Bioptic lens	2	1	3
No traffic	1	0	1
Modified driver position	0	1	1
Total restrictions	99	21	120

Note. The table entries are not independent; 8% of the cases had more than one license restriction recommended or imposed.

Table 8 indicates that there is an underuse of licensing restrictions by the examiners. Surely if the examiners are not revoking or suspending the licenses of those drivers who fail the RDPE—as was just discussed—they should at least be using licensing restrictions to limit the exposure of these drivers. This, however, does not appear to be the case.

It is important to note that a freeway restriction was recommended or imposed for only 4% (*n* = 19) of the cases. This is surprising, considering that the freeway portion of the RDPE was clearly waived for 43% (*n* = 187) of the cases, and appeared to be waived for an additional 19% (*n* = 84) of the cases. The frequent waiver of the freeway requirement and the failure to impose a no-freeway restriction is these cases in clearly inconsistent with RDPE policy.

Reasons for RDPE Referrals

The reasons that the cases were referred for the RDPEs are shown in Table 9. The table entries do not sum to the total number of cases because 27% (*n* = 115) of the referrals had two reasons indicated, 8% (*n* = 33) had three reasons indicated, and 2% (*n* = 9) had four reasons indicated.

The five most frequently indicated reasons for referral to the field offices were drive test failure (20%), poor driving/lack of skill (20%), stroke/cerebral hemorrhage (16%), dementia (14%), and accident/near accident (13%).

Of the 195 cases referred for existing or potential cognitive impairment related to a head injury, stroke, Alzheimer's disease, or other dementia, 25% (*n* = 49) were incorrectly referred for a BDPE instead of an SDPE as required by the RDPE guidelines. In addition, 48% (*n* = 127) of the remaining 265 cases not referred for existing or potential underlying cognitive impairment were incorrectly referred for an SDPE instead of a BDPE. The total of 176 drivers referred for the wrong test represents 38% of the 460 referral cases.

RDPE Referral Sources

The number and percentage of drivers referred from various sources are presented in Table 10, which includes those for whom an RDPE was not administered due to no insurance, a vehicle mechanical problem, or failure to appear. Almost all of the RDPE drivers for whom a source was identified were referred by either law enforcement, a physician or hospital, or a field office.

Table 9

Number of Drivers (*n*) Referred for Different Reasons

Reason for referral	*n*
Drive test failure	90
Poor driving/lack of skill	90
Stroke/cerebral hemorrhage	74
Dementia (diagnosed or possible)	64
Accident/near accident	58
Diabetes	36
Cardiovascular/heart condition	26
Hard of hearing	20
Paralysis	14
Tremor	14
Cataracts	12
Psychological disorder	12
Arthritis/joint degeneration	9
Head injury	9
Blind in one eye	8
Failure to obey police/fire	8
Damage from accident	7
Parkinson's disease	7
Macular degeneration	6
Multiple sclerosis	6
Glaucoma	5
High blood pressure	5
Missing limb(s)	5
Respiratory disorder	5
Law test failure	4
Lapse of consciousness	3
Scoliosis	3
Muscular dystrophy	2
Cerebral palsy	1
Confusion	1
Other physical	42
Other vision	29
Total	675

Note. Thirty-seven percent of the drivers were referred for more than one reason. The 28 drivers who did not actually take an RDPE are included in the numbers. The reason for referral was not stated on the DL 11D for 10 cases.

Table 10

Number (*n*) and Percent of Drivers Referred from Each Source

Source of referral	*n*	%
Law enforcement	130	28.3
Field office	113	24.6
Confidential morbidity report/medical	110	23.9
Calendar reexam	8	1.7
Family	1	0.2
Other	26	5.7
Missing	72	15.7
Total	460	100.0

Note. Drivers who did not complete an RDPE are included.

DISCUSSION

The overall fail rate of the RDPE tests is much higher than the fail rate obtained in R&D's evaluation of the statewide special drive test process prior to the implementation of the RDPE program (Hagge, 1995, Report #160). In light of the intended higher proficiency standards demanded by the DPE test in general, this finding was expected and is a desirable outcome. The majority of the drivers who failed an RDPE test made one or more CDEs. The fail rates were fairly consistent between the different regions; however, the results were suggestive of a slight, albeit nonsignificant, difference in the fail rates.

It was not possible to determine the exact number of cases for which the examiners intended to use the relaxed scoring criteria to evaluate repeat RDPE cases. Of the repeat tests that were identified, the drivers tended to either pass at levels permitted by the standard criteria or fail by egregious error (CDE). Therefore, the application of the relaxed criteria affected only a very small percentage of the cases. Even applying the relaxed criteria to all test cases would not significantly change the test fail rates. This finding suggests that the relaxed criteria option—at least at the current passing score cut-off—is essentially inconsequential and therefore may not be necessary.

As was expected based on their knowledge about the RDPE test scores, the examiners' conclusions about the drivers' abilities to drive safely were very consistent with the

RDPE test results. It appears, therefore, that the competencies the examiners consider to be important for safe driving are reflected in the RDPE scoring criteria.

Most of the time, the examiners simply referred the case back to driver safety with no recommended licensing action after the RDPE was completed. Many of these drivers were RDPE failures who were deemed to be unsafe and, according to RDPE guidelines, should have been revoked by the examiners. Because DS usually indicated on the DL 11D forms that the driver safety officer would make the licensing decision, there may have been some confusion among the examiners regarding their role after an RDPE is administered. According to the RDPE procedures, the examiners are supposed to determine one of the following three things after the test is administered: (a) whether the driver can improve with practice and should be given an additional test of the same type (BDPE or SDPE), (b) whether the driver should be given an ADPE because he or she is unlikely to be able to drive safely in the general driving environment, or (c) whether the driver is so unsafe that they would be a danger to the motoring public if they were to continue driving. Therefore, the examiner's choices are to schedule an additional test of the same type after the driver practices or takes professional training, schedule an ADPE, or revoke the license. The fact that examiners often recommended license revocation to DS instead of revoking the license themselves indicates that the guidelines were not followed. Even if the examiners believed that the drivers needed additional practice, they still should have suspended the licenses of these unsafe drivers and issued a Special Instruction Permit that would have allowed them to drive only in the presence of a licensed driving school instructor.

One way to address the failure of the examiners to revoke unsafe drivers would be to better define in the RDPE guidelines the drive test behaviors that constitute "a danger to the motoring public," making specific reference to CDEs. However, it may be necessary for all RDPE drive tests to be reviewed by a manager or designated staff in order to assure compliance with policy.

The freeway portion of the test was waived for more than half of the RDPE cases. There is no department provision allowing for this to occur without the driver also being restricted from driving on the freeway. However, only a very small percentage of drivers received the freeway restriction. This deviation from policy needs to be corrected before further evaluation of the RDPE process. The examiners also very rarely used other licensing restrictions. Although the number of "marginal" drivers who passed the RDPE by the relaxed licensing criteria was very small, a higher use of licensing restrictions was expected, considering the composition of the referral group. Again, deviations of this magnitude suggest that some type of oversight review may be needed.

Another problem identified in the study is that 38% of the drivers were referred for the incorrect type of drive test. This usually involved sending drivers for an SDPE instead of a BDPE. Because the SDPE takes longer to administer than does the BDPE, its overuse would be expected to increase the workload of the examiners.

Currently, there is little information available to the examiner on the number of previous RDPEs taken by a referred driver. Although DS occasionally indicated in their comments on the DL 11D that the driver had failed a previous drive test, the number and type of previous tests was not usually indicated. This information, if available, would be of value to the examiners in making appropriate decisions regarding what procedure to follow after an RDPE failure.

Regarding the retesting of RDPE failures, the finding that nearly 1 in every 4 (n = 100) cases in the study were identified on the DL 11D as having already taken and failed one or more prior drive tests indicates that retesting may be overused. Any such unnecessary retesting of drivers has substantial workload implications.

RECOMMENDATIONS

- Information on the type and number of previous RDPEs failed by the driver should be required on the DL 11D form for use by the examiners in making licensing decisions.

- The examiners need to take more responsibility for revoking unsafe drivers. More consistently and firmly stating this in the RDPE guidelines, instead of calling it an "option," may help solve this problem.

- The RDPE procedures should include a more specific and objective definition of "unsafe driving" and of what constitutes "a danger to the motoring public" so that the examiners will better know when they should revoke a license. The definition should specifically refer to the occurrence of CDE errors as a qualifying criterion.

- Examiners should be reminded to suspend the license and issue a Special Instruction Permit to drivers who fail the test and are offered a retest following professional driving instruction. Drivers who make CDEs should not normally be considered as candidates for improvement through further practice.

- A limit should be placed on the number of failed drive tests that are allowed prior to the suspension, revocation, or denial of a license. The current guidelines say that there is no number of test failures that would trigger a licensing action. Imposing a limit would result in greater consistency in making licensing decisions and should reduce the workload associated with retesting of RDPE failures. Failure to set a limit on the number of tests is inconsistent with decisions made in the facilitated task force sessions during RDPE development.

- All BDPEs and SDPEs should include freeway driving unless the driver is to be restricted from driving on the freeway, which according to current guidelines is permitted only for drivers 60 years of age or older.

- Steps should be taken to reduce the high volume of drivers referred for the incorrect type of RDPE test. Clarifying and reinforcing the guidelines for determining when to refer for an SDPE or BDPE would help in this regard.

- Field offices and/or regional management should establish a system for monitoring the RDPE process.

- Steps also need to be taken to require that field offices provide data and forms when requested by top management as part of departmental research projects and program evaluations. The absence of any cases from 15 field offices has compromised the validity and generality of the study. In addition, we have no way of knowing whether any of these offices followed departmental policy in administering the RDPE tests.